Abstract

cDNA Amplification for Expression Profiling

This invention presents a new cDNA amplification method. RNA is first converted to cDNA. The synthesis of cDNA can include a promoter tagged oligonucleotide, and then this cDNA is ligated to form circles (or possibly concatemers). This is then amplified using a Phi29 DNA polymerase based rolling circle and strand displacement amplification. The invention allows for RNA promoter sequences to be attached to the cDNA to facilitate additional amplification through the generation of RNA from the amplified cDNA. The resulting product can then be used to make materials for gene expression studies or other RNA analysis procedures.